No. 647,058. Patented Apr. 10, 1900.

L. B. WHITE.

SAFE.

(No Model.) (Application filed June 14, 1899.)

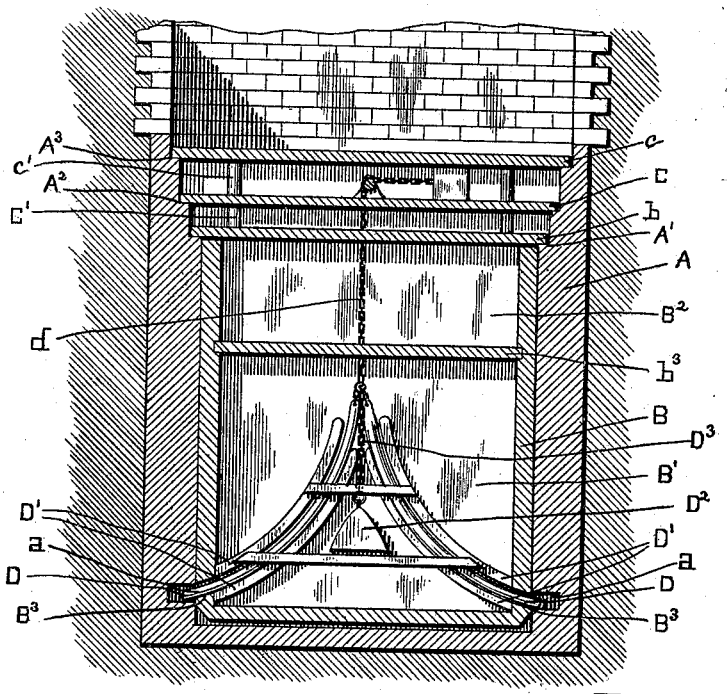

Fig. 2.

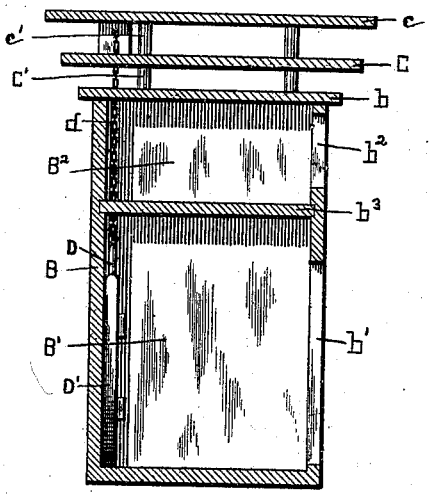

Fig. 1.

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LEVI B. WHITE, OF URBANA, ILLINOIS.

SAFE.

SPECIFICATION forming part of Letters Patent No. 647,058, dated April 10, 1900.

Application filed June 14, 1899. Serial No. 720,560. (No model.)

To all whom it may concern:

Be it known that I, LEVI B. WHITE, of Urbana, in the county of Champaign and State of Illinois, have invented certain new and useful Improvements in Safes; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in safety-vaults for containing money and valuable papers; and its object is to provide a safe which will be both fire and burglar proof; and it consists in the novel constructions and combinations of parts hereinafter described and claimed, the accompanying drawings illustrating a safe embodying the invention, and in which—

Figure 1 is a vertical transverse sectional view of a safe embodying my invention. Fig. 2 is a vertical longitudinal sectional view of a safe embodying my invention, the same being shown in closed position in the vault.

A designates the outer casing or vault, which is preferably made of iron or steel and sunk into the earth at the bottom of a shaft of any desired depth.

B designates a removable safe which telescopes within the vault A and is formed, preferably, of steel such as is used ordinarily in the construction of vaults. This safe is provided with a lower apartment B′ and an upper apartment B^2. The most valuable papers will preferably be placed in the lower apartment, which is separated from the upper one by a thick metallic partition b^3. Of course more apartments may be made in the safe, if desired. The top *b* of the safe B is to be made of tough chilled "safe" metal. When the safe B is lowered into the vault, the projecting edges of top *b* will fit into a shoulder or rabbet A′ at the upper edge of the vault, as shown. Above this top *b* I preferably have one or more supplementary tops, (two, C *c*, being shown in the drawings.) The supplementary top C is preferably larger than top *b*′ and is separated therefrom by interposed thimbles or screw-bolts C′ or any other suitable connections, which will securely unite the tops *b* and C, but keep them slightly separated. Above this supplementary top C is shown a second supplementary top *c*, which is larger than top C, being secured thereto by screw-bolts *c*′, so as to be slightly separated therefrom, in the same manner that top C is secured to top *b*, and these supplementary tops may be placed one above the other in any desired number. The mouth of the vault is also provided with shoulders or rabbets A^2 and A^3, into which the projecting edges of the supplementary tops C *c* respectively fit when the safe is lowered into the vault.

Within the safe are two long curved and weighted bolts D, which are retained in curved guides D′ on the inner wall of the safe and are connected at their upper ends to a rod or chain *d*, which is connected to a time-controlled mechanism of any suitable construction, which I do not deem necessary to show in the drawings, by which at the proper time the bolts are allowed to be raised. At other times the bolts will remain locked. When the safe is lowered into the vault, the lower ends of these bolts will project through openings B^3 in the side walls of the safe and engage with recesses or keepers *a* in the walls of the vault, so that it will be impossible to raise the safe so long as these bolts remain engaged with the keepers. Therefore, if the time mechanism be properly set it will be impossible to raise the safe until the time mechanism releases the bolts. The bolts will drop by gravity; but as an additional precaution a supplementary weight D^2 may be connected to them by a chain or other flexible connection D^3, so as to insure their engagement with the keepers.

A suitable hoisting apparatus (not shown) may be used to raise and lower the safe.

The chambers B′ and B^2 of the safe may be provided with doors b' b^2, secured by commutation or time-locks, if desired, as a further precaution against burglarizing. By the use of supplementary separate covers it would be necessary to drill through and remove each cover successively before entry could be made into the safe proper, and as the covers are separated the violent blowing off of an upper cover will not injure the lower ones.

The time mechanism may be arranged in the spaces between the supplementary covers and may be secured to the upper cover, so that if said cover is forced off in any way the time-lock would be destroyed and the bur-

glars effectually foiled. As an additional precaution, two or more such time mechanisms may be provided, any one of which will unlock the safe at the proper time, so that in case of accidental or violent breakage of one or more of the time-controllers the safe will still be unlocked at the proper time.

Having thus described my invention, what I therefore claim as new, and desire to secure by Letters Patent, is—

1. The combination of the vault, the safe telescoping therein provided with a series of top plates or covers, the lower cover being secured to the top of the safe and each superimposed cover being secured only to the cover immediately below it and having no direct connection with the safe, for the purpose and substantially as described.

2. The combination of the sunken vault, with the safe telescoping therein, provided with a series of separate covers rigidly connected to each other, the lower cover being secured to the top of the safe, and the superimposed covers being secured fixedly to the cover immediately below it and having no direct connection with the safe, said covers being of successively-larger size, for the purpose and substantially as described.

3. The combination of the sunken vault, the safe telescoping therein, and means for locking said safe when lowered into said vault; with supplementary covers attached to said safe and separated from the top thereof, and from each other, by intervening spaces—the first cover being rigidly connected to the top of the safe and the second cover being rigidly connected to the first cover, the connections between the covers being independent, substantially as described.

4. In a safe, the combination of a sunken casing or vault and the safe adapted to fit into said casing, with the oppositely-curved and weighted bolts in said safe adapted to be automatically projected by gravity through openings in the walls thereof into locking engagement with keepers or recesses in the side of the vault when the safe is lowered therein, and means for withdrawing or unlocking said bolts when the safe is to be raised substantially as described.

5. In a safe, the combination of a sunken casing or vault, and the safe adapted to fit into said casing, and opposite curved bolt-guides in said safe; with the opposite curved bolts in said guides adapted to project through openings in the sides of the said safe when the same is lowered, and engage keepers or recesses in the sides of the vault, the weight connected to the bolts, and means whereby said bolts may be retracted when the safe is to be raised, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LEVI B. WHITE.

In presence of—
SPENCER M. WHITE,
OLIVER B. DOBBINS.